A New Species of Kurodaia (Mallophaga: Menoponidae), with Additional Notes on the Genus ¹

ROGER D. PRICE, University of Minnesota

Since the revision of *Kurodaia* Uchida, 1926, by Price and Beer (1963), a series has been obtained of an undescribed species of this genus from an owl. The description of this new species, together with pertinent information for several other *Kurodaia* species, is included in this paper.

Kurodaia gnomae, n. sp.

Type host. Glaucidium gnoma gnoma Wagler.

Female. As in Fig. 1. Head without evidence of mid-dorsal setae; 2 very long marginal temporal setae; inner occipital setae long, outer setae minute. Gula tapered posteriorly, uniformly pigmented, with 5-6 long setae on each side. Margin of pronotum with 2-3 short and 5 long setae on each side. Metanotum marginally with 10 long and 1-2 short setae; metasternal plate with 9–10 medium setae. Tergocentral setae long to very long: I, 7–11; II–VII, 11–14; VIII, 7–8. No anterior tergal setae on any abdominal segments. Postspiracular setae very long on I-VIII. Margin of tergite IX with short, very long, and long seta on each side. Abdominal sternites with marginal row of long setae (I, 6-8; II-IV, 11-16; V-VI, 20-26; VII, 13-15) and anterior row of shorter setae (I, 2; II-VI, 7-10; VII, 3-4). Sternites III and IV each with single lateral comb row; that on III with 9-17 setae, on IV with 7-11; margin of sternite V laterally with 1–2 setae resembling those of combs. Sternites VII-IX fused, with vulval margin having 22-26 evenly spaced medium setae and anteriorly 11-12 on VIII-IX. Small postvulval plates each with 3 long setae. Anal fringe ventrally with 16-19 setae, longer and stouter laterally; dorsally with 25-28 fine setae. Dimensions (in mm): preocular width, 0.42-0.43;

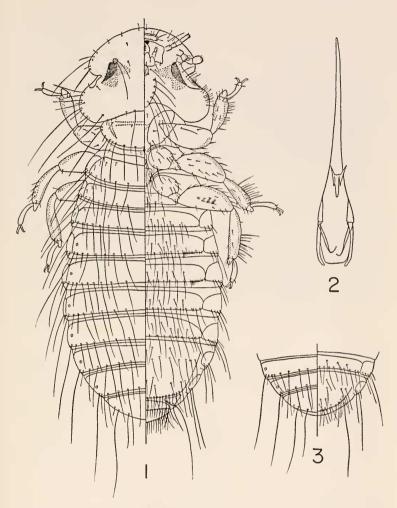
¹ Paper No. 5285, Scientific Journal Series, Minnesota Agricultural Experiment Station, St. Paul, Minnesota 55101.

temple width, 0.52–0.54; head length, 0.34–0.36; prothorax width, 0.33–0.35; metathorax width, 0.45–0.46; total length, 1.54–1.56.

Male. As for female, except for differences in terminal segments (Fig. 3) and for slightly smaller size. Inner posterior seta on tergite IX longer. Sternite VIII with only 7 marginal and 2 anterior setae. Genital plate with approximately 30 setae of varying lengths. Genitalia (Fig. 2) with delicate genital sclerite and penis, rather poorly defined for the only specimen available. Dimensions (in mm): preocular width, 0.40; temple width, 0.47; head length, 0.33; prothorax width, 0.31; metathorax width, 0.40; total length, 1.31; genitalia length, 0.51.

Kurodaia gnomae agrees essentially with the generalized description of the owl Kurodaia as given by Price and Beer (1963). Its dorsal chaetotaxy, aside from apparent absence of mid-dorsal head setae and the presence of a longer stouter inner posterior seta on tergite IX, is close to that of K. cryptostigmatia (Nitzsch). Ventrally the most striking difference from all other Kurodaia known to date is the presence of a single full comb row on both sternites III and IV, and one to several setae on V similar to those of the comb rows. According to the generic concept of Kurodaia by both Price and Beer (1963) and Clay (1947), individuals of this genus were believed to have 2 or more comb rows on sternite III and only a suggestion of a few setae forming a limited comb row on IV. Since all other features of K. anomae agree with the definition of Kurodaia. I see no reason at least for the present to consider this species as being outside of this genus. The small postvulval plates with their 3 long setae as well as the chaetotaxy of the vulval margin and anus further distinguish females of K. gnomae from other species. The male genitalia seem closest to K. painei (McGregor), but differ in smaller size and in shape of the genital sclerite. Both sexes also are the smallest of the known owl Kurodaia.

Material examined: 3 females, 1 male from *Glaucidium gnoma gnoma*, Victoria, Tamps., Mexico, 31 May 1960, Miles. Holotype female, allotype male at United States National Museum; female paratype both in the collection of Dr. K. C. Emerson and at the University of Minnesota.



Figs. 1-3. Kurodaia gnomae, n. sp. 1. Dorsal-ventral view of female. 2. Male genitalia. 3. Dorsal-ventral view of terminal segments of male.

Kurodaia cheelae Price and Beer, 1963

Since the description of this species from a single female, I obtained a male from *Spilornis cheela* (Latham), Mutya, Canon, Philippine Islands, Dec. 25, 1961, Rabor and Gonzales; this specimen presumably is of this species. Although head shape is much like illustration of female *K. cheelae*, the remainder of morphology, including genitalia, and chaetotaxy is quite close to male of *K. fulvofasciata* (Piaget). However, *K. cheelae* differs in lacking anterior setae on abdominal tergites I, III, V–VIII, and having only 1 on II and 2 on IV; this paucity of anterior tergal setae agrees well with the condition of the female of this species.

Additional host records:

Kurodaia fulvofasciata (Piaget)—Accipiter trivirgatus (Temminck) from Philippine Islands and Formosa.

Kurodaia platyclypeatum (Piaget)—Otus bakkamoena Pennant from Formosa and Malaya; O. scops (Linn.) and O. spilocephalus hambroecki (Swinhoe) from Formosa.

LITERATURE CITED

 CLAY, T. 1947. Proc. Zool. Soc. London 117: 457–477.
PRICE, R. D. and J. R. BEER. 1963. Ann. Ent. Soc. Amer. 56: 379–385, 849–857.